

This listing of the claims will replace all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

Claim 1 (currently amended): A device for performing an experiment with a target moiety, comprising:

a substrate having a plurality of probe moieties each attached accurately to a designated site on a surface thereof, and containing machine-readable information relating to the probe and/or target moieties; and

a source of the target moiety,

wherein an interaction between the target moiety and a probe moiety results in a detectable response signal from the site of the probe moiety interacting with the target moiety,

the information is represented by a data signal that is physically associated with the substrate, and

the moieties are accurately attached to the substrate via application of focused acoustic radiation to one or more reservoirs, each containing a moiety for attachment to the substrate surface so as to eject droplets therefrom toward the substrate surface the response and data signals are in the same detectable/readable form.

Claim 2 (previously presented): The device of claim 1, wherein the machine-readable information contains the identity of a customer.

Claim 3 (previously presented): The device of claim 1, wherein the machine-readable information is secured.

Claim 4 (previously presented): The device of claim 1, wherein the machine-readable information contains shipping and/or billing information.

Claim 5 (currently amended): The device of claim 1, wherein the machine-readable information contains the identity of at least one of the probe moieties ~~of the plurality of moieties attached to the device surface~~.

Claim 6 (currently amended): The device of claim 1, wherein the machine-readable information comprises information relating to a process by which the plurality of probe moieties is attached to the substrate surface.

Claim 7 (currently amended): The device of claim 1, wherein the machine-readable information comprises information relating to experimental conditions associated with the use of the plurality of probe moieties.

Claim 8 (currently amended): The device of claim 1, wherein the machine-readable information comprises information relating to the results of an experiment associated with the use of the plurality of probe moieties.

Claim 9 (original): The device of claim 1, wherein the machine-readable information is digital.

Claim 10 (canceled).

Claim 11 (previously presented): The device of claim 103, wherein the machine-readable information is represented by no less than about 1 megabyte of data.

Claim 12 (original): The device of claim 11, wherein the machine-readable information is represented by about 1 to about 650 megabytes of data.

Claim 13 (currently amended): The device of claim 1, wherein ~~the machine readable information is in a format that is the response and data signals are in an optically detectable/readable form.~~

Claim 14 (currently amended): The device of claim 13, wherein ~~the machine readable information is in a format that is the response and data signals are detectable/readable by a fluorescence reader.~~

Claim 15 (currently amended): The device of claim 13, wherein ~~the machine readable information is in a format that is~~ the response and data signals are detectable/readable by a phosphoimager.

Claim 16 (currently amended): The device of claim 13, wherein ~~the machine readable information is in a format that is~~ the response and the data signals are detectable/readable by a compact disk reader.

Claim 17 (currently amended): The device of claim 13, wherein ~~the machine readable information is in a format that is~~ the response and data signals are detectable/readable by a DVDdigital versatile disk reader.

Claim 18 (previously presented): The device of claim 1, further comprising additional information in a format that is readable by a bar code reader.

Claim 19 (original): The device of claim 18, wherein the bar code reader is a one-dimensional bar code reader.

Claim 20 (original): The device of claim 18, wherein the bar code reader is a two-dimensional bar code reader.

Claim 21 (currently amended): The device of claim 1, wherein ~~the machine readable information is~~ the response and data signals are in a magnetically detectable/readable form.

Claim 22 (currently amended): The device of claim 1, wherein ~~the machine readable information is~~ the response and data signals are in an electronically detectable/readable form.

Claim 23 (original): The device of claim 1, further comprising human readable information.

Claim 24 (currently amended): The device of claim 1, wherein the attached probe moieties are protected.

Claim 25 (currently amended): The device of claim 24, further comprising a protective layer over the attached probe moieties.

Claim 26 (original): The device of claim 25, wherein the protective layer is removable.

Claim 27 (original): The device of claim 25, wherein the protective layer allows only selected matter to be transmitted therethrough.

Claim 28 (original): The device of claim 27, wherein the selected matter is electromagnetic radiation.

Claim 29 (currently amended): The device of claim 28, wherein the electromagnetic radiation has a wavelength that causes fluorescence near an attached probe moiety.

Claim 30 (currently amended): The device of claim 1, wherein the plurality of attached probe moieties comprises an array of biomolecules.

Claim 31 (original): The device of claim 30, wherein the biomolecules are nucleotidic or peptidic.

Claim 32 (original): The device of claim 30, wherein the biomolecules are oligomeric or polymeric.

Claim 33 (currently amended): The device of claim 30, wherein the array comprises at least about 5,000 probe moieties per square centimeter of substrate surface.

Claim 34 (currently amended): The device of claim 33, wherein the array comprises at least about 50,000 probe moieties per square centimeter of substrate surface.

Claim 35 (currently amended): The device of claim 34, wherein the array comprises at least about 200,000 probe moieties per square centimeter of substrate surface.

Claim 36 (currently amended): The device of claim 35, wherein the array comprises at least about probe 1,000,000 moieties per square centimeters of substrate surface.

Claim 37 (original): The device of claim 1, wherein the substrate comprises a disk.

Claim 38 (original): The device of claim 1, wherein the substrate comprises a tape.

Claim 39 (original): The device of claim 1, wherein the substrate comprises a well plate.

Claim 40 (original): The device of claim 1, wherein the substrate comprises a slide.

Claim 41 (currently amended): The device of claim 1, wherein the substrate comprises a plurality of surfaces arranged in a three-dimensional structure to which the probe moieties are attached

Claim 42 (previously presented): The device of claim 1, wherein the substrate further comprises a magnetic medium.

Claim 43 (previously presented): The device of claim 1, wherein the substrate further comprises an optical medium.

Claim 44 (currently amended): The device of claim 1, wherein the surface having the probe moieties attached thereto opposes a surface on which the information is located.

Claims 45-90 (canceled).

Claim 91 (currently amended): The device of claim 1, wherein the information is contained in a discrete region of the substrate from the substrate surface having the plurality of ~~molecular probe~~ moieties attached thereto.

Claim 92 (canceled).

Claim 93 (previously presented): The device of claim 91, wherein the discrete region is noncoplanar with respect to the substrate surface.

Claim 94 (currently amended): The device of claim 91, wherein the discrete region of the substrate is movable with respect to the ~~substrate surface to which the moieties are attached~~.

Claim 95 (previously presented): The device of claim 94, wherein the substrate comprises a cartridge.

Claim 96 (currently amended): The device of claim 1, wherein the machine-readable information and the attached probe moieties exhibit positional correspondence.

Claim 97 (previously presented): The device of claim 1, wherein the substrate has a radial mass distribution that is symmetric about an axis, perpendicular to the plane of the substrate surface.

Claim 98 (previously presented): The device of claim 97, wherein the substrate is in the form of a disk.

Claim 99 (previously presented): The device of claim 1, wherein the machine-readable information is contained in a computer microchip.

Claim 100 (previously presented): The device of claim 1, wherein the machine-readable information is stored in a medium capable of emitting radiation.

Claim 101 (previously presented): The device of claim 100, wherein the radiation is electromagnetic radiation.

Claim 102 (previously presented): The device of claim 100, wherein the medium is a fluorescent medium.

Claim 103 (previously presented): The device of claim 1, wherein the information is represented by no less than 1 kilobyte of data.

Claims 104-106 (canceled).

Claim 107 (new): The device of claim 1, wherein the response and data signals are in a radioactively detectable/readable form.

Claim 108 (new): A machine for performing an experiment with a target moiety, comprising:
the device of claim 1;
a means for applying the target moiety from the source to the probe moieties; and
a means for reading the information contained in the substrate and for detecting the detectable response signal resulting from an interaction between the target moiety and a probe moiety.

Claim 109 (new): A method for performing an experiment with a target moiety, comprising:
(a) using a reading and detecting means to read the machine-readable information from the device of claim 1;
(b) applying the target moiety from the source to the probe moieties based upon the information read by the reading and detecting means; and
(c) using the reading and detecting means to detect for a response signal resulting from an interaction between the target moiety and a probe moiety.